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Outline

- SEA Chrome/Cadmium papers
- Supplier obsolescence
 - Randolph TT-P-1757 zinc chromate primer
 - Continental Coatings zinc chromate paste



SEA Chrome/Cadmium Paper

- Chromated primer and conversion coatings
 - Outlines products used by SSP Elements
 - Outlines ongoing or incomplete replacement efforts
 - Lists replacement candidates
- Cadmium plated parts
 - Outlines products used by SSP Elements
 - Outlines ongoing or incomplete replacement efforts
- Outside NASA and OEM efforts



Chromated Primer

- TT-P-1757 Zinc Chromate coating manufactured by Randolph Products
- Initially noted applied color was orange instead of yellow
- Subsequent 1000 hr salt fog failure (small pits)
- Analysis of coating prior to and after pigment change
 - Zinc 7.54% -> 10.1%, Chromium 6.69% -> 2.69%
 - Suspect to contain dichromate ion (orange color)
- Vendor changed zinc chromate pigment suppliers due to obsolescence
 - Rockwood (obsolete) to Lansco (discrepant material) to Nubiola (manufacturer)



Zinc Chromate Paste

- Manufactured by Continental Coatings
- Ceased manufacture in 2007
- Why they quit
 - Health & safety concerns
 - Cost of processing
- MSFC engineering is looking at a replacement

